Applicant: Paul T. Bender Attorney's Docket No.: 02103-0381001 / AABOSS16

Serial No.: 10/657,496

Filed: September 8, 2003

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## Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

## **Listing of Claims**:

1. (previously presented) An active vehicle suspension system with fail-safe operation comprising:

an actuator with an armature and a stator,

the stator having at least one coil with coil ends,

power electronics connected to the coil ends constructed and arranged to deliver power to the actuator through the coil ends, and

a fail-safe clamping circuit connected to the coil ends powered by energy produced from movement of the actuator that is directly conveyed to the clamping circuit from the coil ends, to passively damp the actuator during a failure of the power electronics by clamping the coil ends together.

- 2. (cancelled)
- 3. (previously presented) The system of claim 1 in which there are multiple coils, and the clamping circuit electrically connects coil ends together to change the passive damping characteristic of the actuator.
- 4. (previously presented) The system of claim 1 in which the clamping circuit comprises a solid-state device.
- 5. (currently amended) The system of claim 4 also comprising a with the clamping circuit comprising a rectifier and a single unidirectional switch.
- 6. (currently amended) The system of claim 1 in which the actuator comprises an armature and a stator, a movement of the actuator generating generates a back electromotive

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force (EMF) as a result of the armature moving relative to the stator within the actuator, the back EMF powering the clamping circuit.

7. (previously presented) The system of claim 6 also comprising a supplemental circuit for boosting the back EMF.

- 8. (original) The system of claim 7 in which the supplemental circuit comprises a bipolar Royer oscillator capable of operating at an input voltage of approximately 0.5 volts.
- 9. (previously presented) The system of claim 1 in which the clamping circuit comprises switch circuitry enabled during vehicle startup and shutdown.
  - 10. (cancelled)
- 11. (previously presented) The system of claim 1 in which the clamping circuit comprises switch circuitry pulsed to change the passive damping characteristic of the actuator.
  - 12.-72. (cancelled)